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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/766,290	01/27/2004	David Q. Dobras	0059-014P1	9338
40972 7590 11/26/2007 HENNEMAN & ASSOCIATES, PLC 714 W. MICHIGAN AVENUE THREE RIVERS, MI 49093			EXAMINER PENDLETON, DIONNE	
			ART UNIT 2627	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/766,290

Applicant(s)

DOBRAS ET AL.

Examiner

Dionne H. Pendleton

Art Unit

2627

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 September 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. **Claim 24** is rejected under 35 U.S.C. 102(b) as being anticipated by **Boyden (US 5,737,436)**.

Regarding claim 24, in **figure 1**, Boyden teaches a communications earpiece improvement comprising: a connection tube **(14)** for connecting and acoustically coupling a transducer enclosure **(10)** to an ear bud **(20)**;

an elongated projection **(“30” in figure 2)** connected to at least one of the transducer enclosure and the ear bud *(Boyden teaches connection to the ear bud-20)* for insertion into the connecting tube **(14)**;

and a retainer *(see aperture at end of tube “14” in figure 2; or see aperture at end of projection “50” in figure 4)* on at least one of the connecting tube and the elongated projection *(see figure 2 and figure 5)*, the retainer facilitating positional adjustment between connecting tube and the elongated projection but preventing disengagement of the connecting tube and the elongated projection *(the snug engagement between tube “14” and projection “30” or “50” prevent unintentional disengagement)*; wherein the connecting tube can be rotated about the elongated projection *(Boyden teaches that the*

projection (30) is slid into tube (14), and teaches no mechanism for limiting the rotational movement of projection (30) within tube (14). Therefore, figure 2 is interpreted as teaching that the ear bud (20) is capable of being rotated within tube (14), via rotational force applied by the wearer); and further wherein the end of the connecting tube (18) can be moved longitudinally along at least a portion of the length of the elongated projection (30) (the predetermined length of projection "30" in figure 2, or projection "50" in figure 4, is not provided with structural means for "stopping" the longitudinal movement of tube "14" along its length. Therefore, the length of the projection "30" or "50", permits some degree of positional adjustment of tube "14" along the length thereof, until such point tube "14" abuts the ear bud "20" or becomes disengaged from the projection "30" or "50".

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. **Claims 1-22** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Taenzer (US 6,009,183)** in view of **Boyden (US 5,737,436)**.

Regarding claim 1, TAENZER teaches a communication earpiece comprising:
A transducer enclosure portion (22) having a transducer housed therein (see **column 3, lines 5-7**); in **column 4, lines 27-30**, Taenzer teaches a sound horn (16); and a

generally tubular connection member **(14)** for channeling sound from the transducer enclosure portion to the sound horn **(16)**; wherein **column 3, lines 28-32** teaches a connection member **(14)** having a first adjustment means **(30)** for allowing rotation of the connection member relative to the transducer enclosure portion.

TAENZER does not clearly teach a second adjustment means allowing movement of the sound horn selectively toward or away from the transducer enclosure portion.

BOYDEN teaches, in **figure 2**, a second adjustment means **(18,30)** for connecting a sound horn **(20)** to a connection member **(18)**, wherein the second adjustment means **(18,30)** allows movement of the sound horn (via smooth inner and outer surfaces of articles **18 and 30**, respectively) selectively toward and/or away from the transducer enclosure via sliding motion, see **figure 2** which illustrates that the connecting tube **(14,18)** is disposed at the mid-length portion of projection **(30)**.

It would have been obvious for one of ordinary skill in the art at the time of the invention to combine the teachings of Taenzer and Boyden, substituting the sound horn/sound tube connection **(18,30)** structure taught by **figure 2** of Boyden, for the unitary connection between tip **(16)** and tube **(14)** in Taenzer, thereby providing a releasable connection to the ear tip and also permitting the exchange of ear tips so as to enable a more comfortable fit for the user, if so desired.

Regarding claim 2, Taenzer teaches a first adjustment means including a generally hollow projection **(32)** on the transducer enclosure and a hollow cylindrical end portion **(30)** on the connection member **(14)**.

Regarding claims 3 and 4, in figure 2, Taenzer teaches that the cylindrical end portion (30) is rotatably affixed to the cylindrical projection (32).

Regarding claim 5, in figure 2, Boyden teaches a second adjustment means including a hollow projection (30) on the sound horn (20) and a hollow cylindrical end portion (18) on the connection member (14).

Regarding claims 6 and 7, in figure 2, Boyden teaches that the cylindrical end portion (18) is slidably affixed to the cylindrical projection (30) permitting the longitudinal movement of the cylindrical end portion (18) along at least a portion of the length of the cylindrical projection (30).

Regarding claims 8 and 9, Taenzer teaches a cylindrical end portion (30) rotatably affixed to the cylindrical projection (32), see column 5, lines 1-2.

Regarding claim 10, figure 2 of Boyden teaches a third adjustment means (articles 18 and 30 having smooth inner and outer surfaces, respectively; additionally rotational adjustment is achieved via rotational force externally applied by the user) for allowing the rotation of the sound horn in relation to the connection member. Note, that Boyden teaches that the projection (30) is slid into tube (14), and neglects to teach an mechanism for limiting the rotational movement of projection (30) within tube (14), figure 2 is interpreted as teaching that the connecting tube (14) can be rotated about the elongated projection, via rotational force applied by the wearer.

Regarding claim 11, Boyden teaches a second adjustment means (18,30) and third adjustment means (articles 18 and 30 having smooth inner and outer surfaces, respectively; also see rotational force) which are a single connection; wherein the

connection includes a hollow cylindrical projection (30) on the sound horn (20) and a hollow cylindrical end portion (18) on the connection member (14).

Regarding claims 12 and 13, Boyden teaches a cylindrical end portion (18) slidably affixed to a cylindrical projection (30) such that the end portion (18) can be moved longitudinally along a portion of the length of the cylindrical projection.

Regarding claims 14 and 15, Boyden teaches a cylindrical end portion (18) rotatably affixed to the cylindrical projection (30).

Regarding claim 16, Taenzer teaches a connection member (14) being bent (48) such that the connection member can rotate in relation to the transducer enclosure; while in **figure 2**, Boyden teaches that the sound horn (20) can rotate in relation to the connection member (14) about a second axis via applied rotational force.

Regarding claim 17, both Taenzer and Boyden teach that the transducer enclosure portion is adapted for hooking over the top of the user's ear.

Regarding claims 18 and 22, Taenzer teaches a transducer enclosure portion (22) and transducer housed within said transducer portion; a sound horn (16); a connection member (14); a first generally hollow projection (32) on the transducer enclosure; and a connection member (14) rotatably affixed to the first generally hollow projection (32); while Boyden teaches a sound horn (20) having a second generally hollow projection (30); and a connection member (14) rotatably affixed at the other end (18) to the second generally hollow projection (30). It would have been obvious for one of ordinary skill in the art at the time of the invention to combine the teachings of Taenzer and Boyden, substituting the sound horn/sound tube connection (18,30)

structure taught by **figure 2** of Boyden, for that of Taenzer, which would provide a releasable connection thus permitting the exchange of ear tips so as to enable a more comfortable fit for the user, if so desired.

Regarding claim 19, Taenzer teaches that one end **(30)** of the connection member **(14)** fits over the first generally hollow projection **(32)**; while Boyden teaches that the other end of the connection member **(18)** fits over the second generally hollow projection **(30)**.

Regarding claim 20, Taenzer teaches a connection member **(14)** being bent **(48)** such that the connection member can rotate in relation to the transducer enclosure; while in **figure 2**, Boyden teaches that the sound horn **(20)** can rotate in relation to the connection member **(14)** about a second axis via applied rotational force.

Regarding claim 21, Boyden teaches that the second generally hollow projection **(30)** is elongated such that the connection member **(18)** can be moved along at least a portion of its' length.

3. **Claims 23, and 25-28** are rejected under 35 U.S.C. 103(a) as being unpatentable over Taenzer (**US 6,009,183**) in view of Boyden (**US 5,737,436**), and further in view of Connors et al. (**US 2002/0181728**).

Regarding claim 23, TAENZER teaches a communication earpiece, comprising:
a transducer enclosure portion ("**22**" in **figure 1**);
a transducer housed within (**column 3, lines 5-6**);

while the combined teachings of TAENZER AND BOYDEN, as set forth in the rejections of claims 1 and 10 above, teach a mechanical arrangement wherein the sound horn is adjustable in all three physical dimensions.

The combined disclosures of Taenzer and Boyden fail to teach a sound horn specifically constructed as claimed.

CONNORS teaches a non-occluding sound horn ("**26**" in **figure 1**) including a reverse horn having a textured surface (**28**) and configured for placement in the ear canal of the user, the textured surface operative to vary the amount of occlusion of the ear canal depending on the placement of the sound horn relative to the user's ear canal (**paragraph [0021]**).

It would have been obvious for one of ordinary skill in the art at the time if the invention to substitute the non-occluding sound horn of Connors for the ear tip of Taenzer, thereby providing an alternative ear bud structure which will prevent the ear canal from being completely blocked and also which will permit the wearer a choice in how the ear bud may be worn in the ear (**paragraph [0021]**).

Regarding claim 25, in **paragraph [0021]**, Connors teaches an ear bud of soft rubber material, corresponding to the recitation "the ear bud is flexible.

Regarding claim 26, Connors teaches that the textured surface includes grooves ("**30**" in **figure 1**).

Regarding claim 27, figure 1 appears to illustrate that the textured surface includes ridges, as broadly claimed (*see connection point of cover “32” to ear portion “28”; also see ridges provided at the outer peripheries of grooves “30”*).

Regarding claim 28, since the diameter of ear bud (14) increases toward its housing portion which lies external to the ear canal, said ear bud (14) will provided more occlusion, when it is placed deeper into the ear canal.

Response to Arguments

4. Applicant's arguments filed 9/10/2007 have been fully considered but they are not persuasive.

With regard to the Rejection Under 35 U.S.C. 102, Claim 24:

5. The Applicant's argument that “Tube 14 Of Boyden “Can Be Rotated About The Elongated Projection” Only In The Sense That Temple 122 (Boyden, Fig. 7) Can Be “Detached” From Eyeglasses 124 By Breaking It Off At The Hinge”:

The Examiner respectfully disagrees with the Applicant's characterization of the Boyden reference. In **column 6, lines 20-24**, Boyden suggests more than one means for connecting tube 14 and projection 30. One of said means suggested by Boyden includes “pressing the tube over or onto a fitting” and **will not** require an adhesive or any other permanent means for attachment. Therefore the “pressed fit” connection will not require that tube 14 be broken from its connection so as to permit rotation, as suggested by the Applicant.

6. In response to applicant's argument that "Boyden Does Not Disclose 'Positional Adjustment Between The Connecting Tube And The Elongated Projection' Or 'Retainer'...Therefore, Boyden Does Not Anticipate The Amended Claim 24":

Please see the new detailed rejection of claim 24, above.

With regard to the Rejection Under 35 U.S.C. 103, Claims 1-23:

7. The Applicant's argument that "Boyden Does Not Teach Or Suggest Any 'Adjustment Means For Allowing Movement Of The Sound Horn Selectively Toward And/Or Away From The Transducer Enclosure Portion.' Rather, Boyden Merely Describes The 'Securing' Of Tube 14 To Fitting 30 On Ear Bud 20."

As set forth in the above Office Action, the predetermined length of projection "30" in figure 2 of Boyden, or projection "50" in figure 4 of Boyden, is not provided with structural means for "stopping" the longitudinal movement of tube "14" along its length. Therefore, the length of the projection "30" or "50", permits some degree of positional adjustment of tube "14" along the length thereof until such point tube "14" abuts the ear bud "20" or becomes disengaged, hence allowing for the adjustment of the sound horn "20" toward or away from the transducer enclosure.

8. The Applicant's argument that "A Pressing Operation" Cannot Be Fairly Considered As "Adjustment Means":

Both, the Applicant and the prior art of record employ tubular insert mechanisms. The Applicant's reliance upon the tubular insert structure for its adjustment capabilities is not sufficient to distinguish from the Boyden references since the claimed invention must result in a structural difference between the claimed invention and the prior art in

order to patentably distinguish the claimed invention from the prior art. Since the structure of Boyden is capable of performing the intended use, it fairly meets the claim.

9. The Applicant's argument that "The Connections Cited By The Examiner Can Not Be Considered 'Adjustment Means' Because The Connection Do Not Provide Any Meaningful Adjustment."

The structure of Boyden is capable of performing the intended use. Therefore, the structure of Boyden fairly meets the claim.

10. In response to applicant's argument that The Prima Facie Case Of Obviousness Is Not Met, Because "There Is No Suggestion Or Motivation To Combine References". More Specifically, The Motivation Provided By The Examiner Is Not Identical To The Motivation Of The Applicant:

The fact that Applicant has recognized another advantage which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious. See *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985).

11. Applicant's arguments with respect to claims 23 and 24 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dionne H. Pendleton whose telephone number is 571-272-7497. The examiner can normally be reached on 10:30-7:00 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wayne Young can be reached on 571-272-7582. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


D. Pendleton